

Title (en)
Driver for a power semiconductor module

Title (de)
Treiber für ein Leistungshalbleitermodul

Title (fr)
Pilote pour un module semi-conducteur de puissance

Publication
EP 2388918 A3 20160330 (DE)

Application
EP 11162050 A 20110412

Priority
DE 102010029177 A 20100520

Abstract (en)
[origin: EP2388918A2] The driver (2) has a converter (16) for supplying a power signal (36) to a power transformer (14), where the power signal has specific working frequency. The power signal contains switching energy (38), and is amplitude-modulated according to a logic signal (42). The converter is adapted to a parasitic element (Cin) of the transformer with respect to the working frequency such that the working frequency always corresponds to resonant frequency (fr) of the transformer, where the parasitic element determines the working frequency.

IPC 8 full level
H02M 3/335 (2006.01); **H03K 17/689** (2006.01)

CPC (source: EP)
H02M 1/08 (2013.01); **H03K 17/6895** (2013.01); **H02M 1/0058** (2021.05); **Y02B 70/10** (2013.01)

Citation (search report)

- [X] FR 2854745 A1 20041112 - CENTRE NAT RECH SCIENT [FR], et al
- [X] US 6044003 A 20000328 - TOSHINARI KYOJI [JP], et al
- [X] VASIV D ET AL: "A new MOSFET & IGBT gate drive insulated by a piezoelectric transformer", 32ND.ANNUAL IEEE POWER ELECTRONICS SPECIALISTS CONFERENCE. PESC 2001. CONFERENCE PROCEEDINGS. VANCOUVER, CANADA, JUNE 17 - 21, 2001; [ANNUAL POWER ELECTRONICS SPECIALISTS CONFERENCE], NEW YORK, NY : IEEE, US, vol. 3, 17 June 2001 (2001-06-17), pages 1479 - 1484, XP010559437, ISBN: 978-0-7803-7067-8, DOI: 10.1109/PESC.2001.954328

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
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EP 11162050 A 20110412; DE 102010029177 A 20100520